

REMARKS

Reconsideration and allowance of this application are respectfully requested in light of the above amendments and the following remarks.

Applicant wishes to thank the examiner and his supervisor for the courtesy extended to Applicant's representative during a personal interview conducted on November 13, 2009. The participants were Exr. Paras Shah, SPE Talivaldis Smits and David Ward, Reg. No. 45198. During the interview, the examiners agreed that the claim amendments provided herein overcome the pending rejections. A summary of the substance of the issues discussed during the interview is included below.

Claims 21, 22, 30, and 31 have been amended. Support for the amendments is provided at least in Fig. 19 and paragraphs [0141]-[0148] of the published specification. (It should be noted that references herein to the specification and drawings are for illustrative purposes only and are not intended to limit the scope of the invention to the referenced embodiments.)

Claims 3, 5, 6, 11, 21, 22, 30, and 31 were rejected, under 35 USC §103(a), as being unpatentable over Jin et al. (JP 08-263096) in view of Nomura (JP 10-207496) and Levine ("A Switched Parametric & Transform Audio Coder," 1999). While claim 23 is not included in the statement of rejected claims on page 3 of the Office Action, page 8, first paragraph indicates that claim 23 should be included in this rejection. Claims 7 and 8 were rejected, under 35 USC §103(a), as being unpatentable over Jin et al. (JP 08-263096) in view of Nomura (JP 10-207496), Levine ("A Switched Parametric & Transform Audio Coder," 1999), and Kono (JP 08-046517). To the extent that these rejections may be deemed applicable to the amended claims presented herein, the Applicant respectfully traverses as follows.

Claim 21 now defines an acoustic coding apparatus that:

(1) divides a plurality of frequency domain transform coefficients into a plurality of domains on a two-dimensional time-frequency plane, such that each domain includes a plurality of frequency domain transform coefficients that are grouped continuously along a time axis;

(2) determines a part of the plurality of domains in each base frame to be quantization targets based on the power spectrum values of the frequency domain transform coefficients within each domain; and

(3) encodes the domain information and the frequency domain transform coefficients within the part of the plurality of domains shown by the domain information and obtains an enhancement layer coded code.

The claimed subject matter provides an advantage of encoding a signal, which predominantly comprises speech with music and noise superimposed in the background, with high quality using a low bit rate and short delay (see the specification at page 6, line 25, through page 7, line 9).

The Office Action acknowledges that Jin and Nomura do not disclose or suggest the Applicant's claimed subject matter of: (1) dividing a plurality of frequency domain transform coefficients into a plurality of domains on a two-dimensional time-frequency plane, such that each domain includes a plurality of frequency domain transform coefficients that are continuous in a time direction; (2) determining a part of the domains to be quantization targets; and (3) encoding domain information (see the Office Action page 5, second paragraph). To overcome this deficiency, the Office Action proposes that Levine discloses the subject matter of items (1)-(3) (see page 5, last paragraph, through page 6, second paragraph).

However, Levine does not disclose the Applicant's claimed subject matter of generating information of quantization targets based on the power spectrum of frequency domain coefficients. Although the Office Action proposes that Levine's disclosed frequency "pruning" (i.e., attenuation) operation corresponds to this claimed subject matter (see Office Action page 6, lines 3-4), Levine's attenuation operation does not consider a power spectrum. Instead, Levine's attenuation operation attenuates high-frequency transients existing at the first and last 20 ms of a 70 ms signal so as to reduce the coefficients that would otherwise be generated for these high-frequency components of the signal by a subsequent MDCT operation. Levine does not disclose generating information based on a power spectrum.

Because Levine does not disclose the Applicant's claimed subject matter of generating information of quantization targets based on the power spectrum of frequency domain coefficients, as discussed in the preceding paragraph, it necessarily follows *per force* that Levine cannot disclose the claimed subject matter of coding this information.

Accordingly, the Applicant submits that the teachings of Jin, Nomura and Levine, even if combined as proposed in the Office Action, still would lack the above-noted features of claim 21, and thus, these references, considered individually or in combination, do not render obvious this claim. Independent claim 30 similarly recites this subject matter, but with respect to a method. Independent claims 22 and 31 recite an acoustic decoding apparatus and method corresponding to the acoustic coding apparatus and method of claims 21 and 30, respectively, and perform the inverse functionality of the coding apparatus and method. Therefore, the rejections applied to claims 7 and 8 are obviated, and allowance of claims 21, 22, 30, and 31 and all claims dependent therefrom is deemed to be warranted.

In view of the above, it is submitted that this application is in condition for allowance, and a notice to that effect is respectfully solicited.

If any issues remain which may best be resolved through a telephone communication, the Examiner is requested to telephone the undersigned at the local Washington, D.C. telephone number listed below.

Respectfully submitted,

/James Edward Ledbetter/

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